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10/623,402	07/18/2003	Michael R. Schwarz	CS-7890	4637

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EXAMINER

CLAYTOR, DEIRDRE RENEE

ART UNIT

PAPER NUMBER

1627

NOTIFICATION DATE

DELIVERY MODE

03/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/623,402

Applicant(s)

SCHWARZ, MICHAEL R.

Examiner

Renee Claytor

Art Unit

1627

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/226)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

Applicants present arguments over the 35 U.S.C. 103 rejection over Turnblad et al. (US Patent 5,876,739) in view of Senn et al. (WO 01/26468) and Szczepanski et al. (US Patent 4,523,947). In particular, Applicants argue that Turnblad et al. indicates that the insecticidal coating does not cause phytotoxicity, which is distinguished from the claimed method of reducing phytotoxicity caused by herbicide application. Applicants further argue that Turnblad et al. describes a lengthy list of potential insecticides and herbicides, but provides no motivation for one to select the specific chloronicotinyl insecticide and herbicide combinations. Applicants further argue that Senn et al. bear no relationship whatsoever to a method of reducing phytotoxicity caused by an herbicide application but describe applying neonicotinoid compounds to plants in order to improve plant growth. Applicants further argue that Szczepanski et al. teach protecting plants by using triazine derivatives, but do not teach or suggest reducing phytotoxicity by applying a chloronicotinyl insecticide compound together with an herbicidal compound to corn or maize.

In response to the above arguments, it is noted that Turnblad et al. teaches that the seed coating taught in the invention solves the problem of direct insecticide phytotoxicity to the seed. Therefore, it is argued that Turnblad et al. does teach insecticide phytotoxicity to the seed. The rejection pointed out that Turnblad does not have a specific teaching of the insecticide and the herbicide; however, this is where Senn et al. and Szczepanski et al. make the invention obvious. Though Applicants

argue that Senn et al. bear no relationship to a method of reducing phytotoxicity caused by herbicide application, it is noted that Senn was used for the specific teaching that the compounds thiamethoxam or imidacloprid can be applied directly to the seed and the usefulness of this and the rate of application. Further Szczepanski et al. was used for the specific teaching of the use of triazines for protecting maize plants, including the seed. Therefore, the art teaches the usefulness of applying the chloronicotiny insecticides and a herbicidal composition to reduce phytotoxicity as taught by Turnblad et al.

Therefore, the rejections are deemed proper and are given below for Applicants convenience.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Turnblad et al. (US Patent 5,876,739) in view of Senn et al. (WO 01/26468) and Szczepanski et al. (US Patent 4,523,947).

Turnblad et al. teaches insecticidal coating for a seed comprising an effective amount of an insecticide and among the insecticides listed include imidacloprid (Col. 1, lines 29-36; Col. 4, lines 14-37) and thiamethoxam (Col. 4, lines 66-67 – Col. 5, lines 1-

10 or Formula II). In addition to the insecticidal coating layer, the seed may be treated with other herbicides of which include chloroacetamides and triazines (Col. 6, lines 39-42; Col. 7, lines 3-6). The insecticidal coating on the seed is effective against insect pests without causing phytotoxicity to the seed (Col. 2, lines 45-50). Particular crop seeds that can be treated according to the invention include corn (also known as maize; Col. 5, lines 65-67 – Col. 6, lines 1-3).

Though Turnblad et al. teaches the combination of the insecticide and the herbicide, there is no specific teaching by way of an example exemplifying the two being applied to corn (maize) seed.

Senn et al. teach a method of improving the growth of plants comprising applying to the locus a compound of Formula Ia (thiamethoxam) or imidacloprid (page 3, second full paragraph). Crops that can be improved according to the method include maize (page 5, first full paragraph). Senn et al. also teaches that the compositions are suitable for the treatment of plant seeds (see second full paragraph on page 8). Senn et al. teaches that the compositions can provide pesticidal activity in addition to enhancing plant growth (see page 4). Senn et al. teach application to the leaves of the plants (meeting the limitation of claim 18; last paragraph of page 7 spanning into page 8). Due to Senn's teachings of applying the composition to the seed and the foliage of the plant, Senn reads on pre-emergent and post-emergent treatment (claim 19).

Szczepanski et al. teaches the use of triazines for protecting maize plants against the harmful effects of chloroacetamides and the administration of the two

herbicides together (Col. 1, lines 5-10). Szczepanski et al. teaches treating the seed of the maize plant or the soil where the plant is to be planted (Col. 5, lines 46-55).

Accordingly, it would be obvious to a person of ordinary skill in the art to use the combination treatment of an insecticide such as imidacloprid or thiamethoxam with herbicides such as triazines and chloracetamide as taught by Turnblad et al. to treat seeds or plants of corn or maize because the prior art teaches that the herbicides triazine and chloracetamide are useful in treating corn or maize seeds. One would be motivated to use the insecticide and herbicide of the present invention because it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069, 1072 (CCPA 1980).

It is noted that Senn et al. teach that the insecticide can be applied at a rate of application of from 0.0005 to 1 kg per 1 kg of material to be protected. Furthermore, it is obvious to vary and/or optimize the amount of insecticide provided in the composition, according to the guidance provided by Senn et al., to provide a composition having the desired properties such as the desired concentrations to the seed. As Senn et al. discusses on the last paragraph of page 8 spanning into page 9, the application conditions depend essentially on the nature of the material and on its environmental factors and one would be able to determine which doses are non-phytotoxic. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not

inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding the limitation of the soil temperature being from about 4°C to about 25 °C, Senn et al. and Szczepanski et al. teach application of the compositions to the soil at the plant locus as discussed above, and accordingly it is considered that one of ordinary skill in the art at the time of the invention was made would have found it obvious to apply the composition to soil at the native or outdoors temperature of the soil, including temperatures from 4°C to about 25 °C, with the expectation of achieving insecticidal effects as well as reduction in phytotoxicity. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee Claytor whose telephone number is (571)272-8394. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627